Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method for solving nogood databases, comprising:

generating a representation comprising a plurality of contexted disjunctions;

conjoining all of the contexted disjunctions to form a conjunction of contexted disjunctions; ~~and~~

storing the representation as the conjunction of contexted disjunctions; and

eliminating nogoods by refining the representation until a result of the conjunction of contexted disjunctions is backtrack-free or the result of the conjunction of contexted disjunctions reduces to false.

2.   (Canceled)

3.   (Original) The method of claim 2, wherein refining the representation is carried out without reordering the disjunctions.

4.   (Original) The method of claim 2, wherein refining the representation is carried out without merging the disjunctions.

5.   (Original) The method of claim 1, further comprising transforming the representation so that the conjunction of contexted disjunctions is backtrack-free.

6.   (Original) The method of claim 5, wherein transforming the representation is carried out without reordering the disjunctions.

7.   (Original) The method of claim 5, wherein transforming the representation is carried out without merging the disjunctions.

8.   (Original) The method of claim 1, further comprising transforming the representation so that choosing any disjunct from each of the disjunctions results in a valid solution.

9.   (Original) The method of claim 8, wherein transforming the representation is carried out without reordering the disjunctions.

10.   (Original) The method of claim 8, wherein transforming the representation is carried out without merging the disjunctions.

11.   (Currently Amended) A system for solving nogood databases, comprising:

a storage device that stores a representation comprising a plurality of contexted disjunctions; and

a processor that:

conjoins all of the contexted disjunctions to form a conjunction of contexted disjunctions and replaces the representation with the conjunction of contexted disjunctions; and

eliminates nogoods by refining the representation until a result of the conjunction of contexted disjunctions is backtrack-free or the result of the conjunction of contexted disjunctions reduces to false.

12.   (Canceled)

13.   (Original) The system of claim 11, further comprising a processor that transforms the representation so that the conjunction of contexted disjunctions is backtrack-free.

14.   (Original) The system of claim 11, further comprising a processor that transforms the representation so that choosing any disjunct from each of the disjunctions results in a valid solution.

15.   (Previously Presented) The method of claim 1, further comprising:

solving a nogood database using the representations, the nogood database

comprising at least one nogood.

16.   (Previously Presented) The method of claim 1, wherein a nogood is a

propositional variable or a conjucnction of propostional variables whose associated

constraints are unsatisifable.